

NESTLÉ PROFESSIONAL NUTRITION MAGAZINE 5/2023

Food Allergens

Know Your Allergens

Ingredients to Watch

Serving Your Guests Safely



F O O D allergies

FOOD
ALLERGIES
AFFECT
250
MILLION
PEOPLE
GLOBALLY

MOST FATAL^{3,4,5}
REACTIONS ARE
TRIGGERED BY
FOOD SERVED
OUT OF HOME

THERE ARE AROUND 170 KNOWN FOOD ALLERGENS²

FOODS
CAUSE
THE MAJORITY OF
ALLERGIC
REACTIONS in Aust & NZ®



Admissions

for life-threatening anaphylaxis to

food

HAVE INCREASED

4-fold
INTHE
LAST
14 years

THE COST OF CHILDREN'S FOOD ALLERGIES IN THE US IS NEARLY

\$25 BILLION PER YEAR HAS
FOOD
ALLERGIES?

1 in 10 BABIES

1 in 20 CHILDREN



1 in 50
ADULTS



What are food allergies?

Food allergies occur when a person's immune system recognises the protein in a particular food as a threat and the body responds with physical reactions (e.g. hives, upset stomach, difficulty breathing).



As a food service provider, you're expected to serve safe and satisfying food to your customers, and one of the most important ways to do that is to learn about food allergies.

Food allergies affect hundreds of millions of people worldwideyou probably know someone with a food allergy. In fact, food allergy prevalence is becoming more common, and reactions are also becoming more severe. 10

While many different foods can cause allergies, most problems arise from a handful of common allergens. Reactions can be mildly uncomfortable, serious, or even fatal, and they can happen anywhere-even in your dining room! In fact, the majority of fatal allergic reactions occur with foods served outside of the home.

However, by taking a few important safeguards, you can help protect both your customers and your business from the harmful effects of food allergies.

In this issue, we'll tell you more about common allergens, safe practices you can follow in the kitchen and at the table, and alternatives to satisfy customers with food allergies.

Ready to learn what you can do about food allergies? Let's get started.



Food allergies are widespread and can be unpredictable. While some people never experience a problem, allergic reactions could potentially affect anyone including you, your customers, or your staff.



Food allergies are most common in babies and children, but they can arise at any point in life—even if someone has eaten a particular food for years with no problems.¹¹

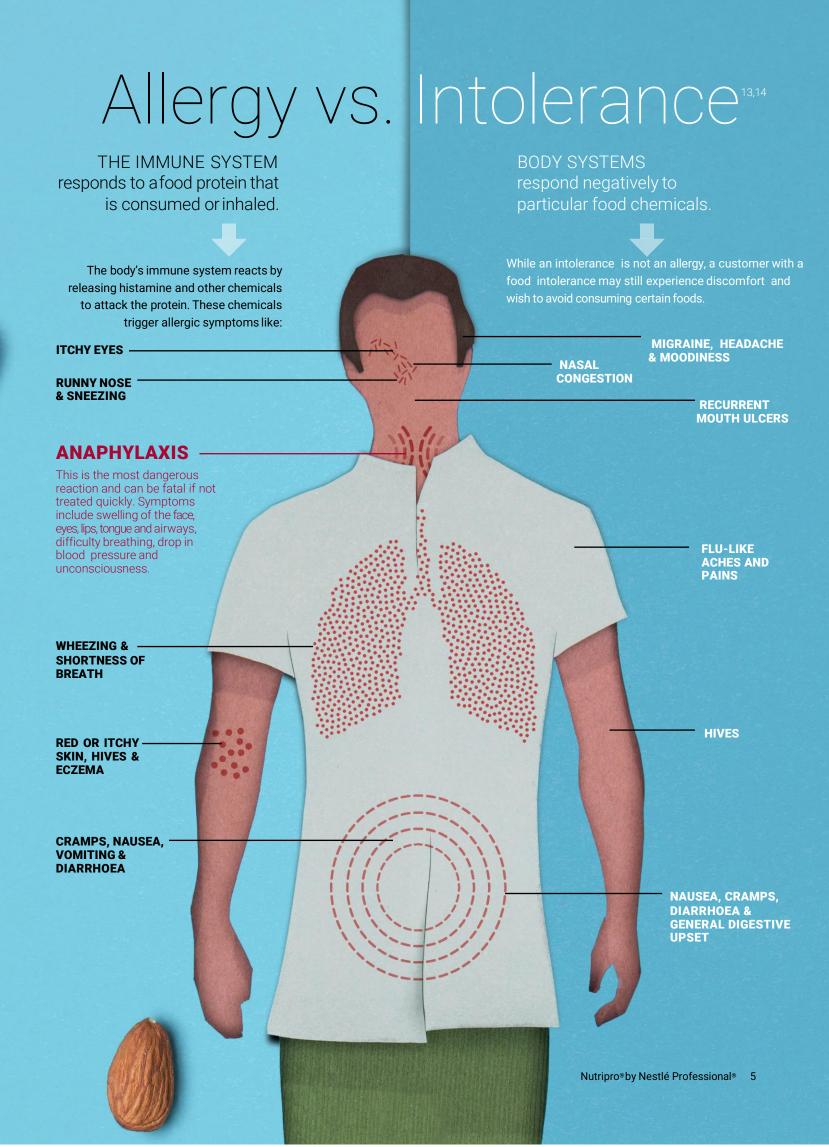
Children may grow out of some food allergies when they become adults, but there is currently no medical cure. People who are affected must follow strict avoidance diets to avoid a reaction.¹²

Allergy or intolerance, what's the difference?

Many think they're allergic to a food when they're actually intolerant. And it's easy to confuse. Food intolerances don't involve the body's immune system unlike food allergy and Coeliac Disease.

An intolerance can be triggered by naturally occurring or added food chemicals which irritate nerve endings giving rise to symptoms. Intolerances may also result from the body's inability to process food chemicals such as in the case of lactose

Food intolerances are also dose dependant and may require a threshold of the culprit food chemical to be reached before symptoms occur. Food allergies on the other hand are generally immediate and in sensitive individuals life threatening reactions can result from even tiny amounts.^{13,14}





Allergies can be caused by up to 170 different foods, but most of them are linked to a much smaller group of foods. Some countries recognize "The Big 8,"15 while others expand the list to up to 14 food allergens. In Australia and New Zealand several allergens are recognized as significant enough to require mandatory food labelling. The following pages will point out some of the foods to avoid for each type of allergy. However, please note that these lists are not exhaustive and other examples may still cause allergic reactions. Check labels for statements like "may contain..." or "made in a facility that processes..." to alert you of other sources for allergens. Products with statements such as these for a particular allergen are NOT suitable for inclusion in recipes on a menu that is free of that allergen.



Know the allergens that must be declared on food labels:

PEANUT and 9 TREE NUTS to be named as individual allergens:



PEANUT



ALMOND





BRAZIL NUT



CASHEW



HAZELNUT



MACADAMIA



PECAN



PINE NUT





PISTACHIO



WALNUT

GLUTEN and cereals containing gluten - WHEAT, BARELY, OATS & RYE to be named as individual allergens











FISH, MOLLUSC AND CRUSTACEAN to be named as individual allergens:





MOLLUSC



CRUSTACEAN

ALL other allergens to be named on food labels:







SOY, SOYA OR SOYABEAN







ADDED SULPHITES (≥ 10mg/kg)

PEANUTS & TREE NUTS

Peanuts are a common allergy among children. While tree nuts are biologically different, they are also among the top food allergies, and up to 40 percent of people with peanut allergies are allergic to at least one tree nut.¹¹ When preparing food for these guests, take care with the following ingredients.



⊘ AVOID

Peanuts

- · Beer or monkey nuts
- Ground nuts
- Nut extract
- Nutmeat
- Peanuts whole or ground
- Peanut butter or paste
- Peanut oil
- Peanut flour

Tree nuts

- Whole, ground/ meal, flour, oil, pastes or milk from tree nuts
- Almonds
- Brazil nuts
- Cashews
- Hazelnuts
- Macadamia nuts
- Hickory nuts
- Pecans
- Pine nuts
- Walnuts
- Pistachio nuts

CHECK LABELS

 African, Asian, and Mexican & Indian cuisine (high risk of cross contact) Snack foods

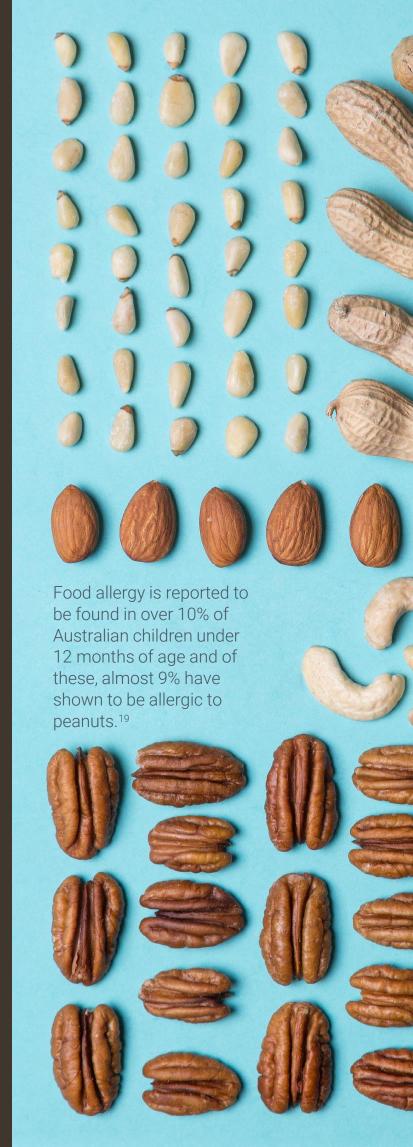
substitutes

Turkish delight

Vegetarian meat

- Candy, chocolate,& desserts
- Breakfast cereals
- Chilli
- Crackers & cookies
- Egg rolls
- Flavoured coffee
- Frozen desserts
- Glazes, marinades & sauces
- Health bars
- Marzipan
- Nougat
- Pesto
- Salads
- Soups

Not an exhaustive list. Read ingredient labels carefully. 17,18

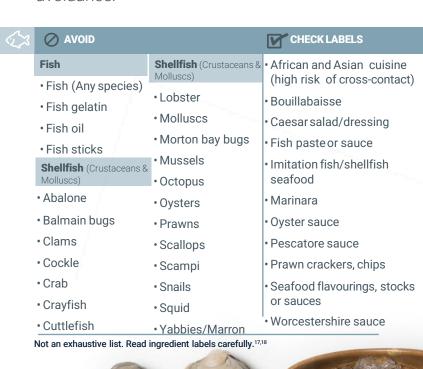




FISH

MOLLUSC & CRUSTACEA

There are more than 20,000 species of fish. Some people are allergic to only certain varieties, but medical professionals typically recommend that people with fish allergies avoid all types. Other kinds of seafood are also linked to serious food allergies. Unfortunately, fish and seafood allergies are usually not outgrown, so they require life-long avoidance.



Allergens, including seafood, can become airborne, particularly with fried or steamed preparations.

Avoid seating guests with seafood allergies near the kitchen.



Milk is another common food allergen, especially for infants and young children. Since the proteins from milk in cow, sheep and goat are similar, those with milk allergies may need to avoid milk and milk products from other domestic animals such as goat, buffalo & camel.

AVOID

- · Ice cream
- · All milk from any domestic animal (liquid, condensed, powdered, malted, • Foods with evaporated)
- Buttermilk
- Butter
- · Cheese and cottagecheese
- Cream
- Cream soups
- · Coffee creamer
- Custard
- Ghee

- Mayonnaise
- lactose or
- casein · Sour cream
- · Whey protein, powder
- Whipped topping
- Yoghurt
- - Gravy
 - · Lactic acid

CHECK LABELS

· Candy and

chocolate

· Deli meats

Fruit juice

Hot dogs

cultures

• Egg replacers

Fat substitutes

(except kosher)

- · Baked or battered · Margarine spreads goods
 - Nougat
 - Pastry
 - Probiotics
 - Sausages
 - Stock

 - Sausages

Lactose

INTOLFRANCE

Up to 65% of the human population may be lactose intolerant,20 which means the body has trouble digesting the main sugar in milk and dairy foods. While not a food allergy, lactose intolerance can cause cramps, diarrhoea, and other digestive upsets for those who consume dairy products in larger amounts.

Not an exhaustive list. Read ingredient labels carefully. 17,18

CHEF TIPS Milk is an everyday ingredient in many recipes, but there are many ways to get around dairy allergies.

rice, oat or coconut milk

Replace dairy milk with almond milk, soy milk*, broth, or juice can also be

In some recipes, water, substituted for milk

Cook with oil instead of butter

Rice milk can be used as a thickening agent in baked goods or desserts

Look for "pareve" on kosher food labels which indicates a milk-free product



*Those who are allergic to milk may also have allergies to soy products. Check before assuming soy is a suitable replacement for dairy.

10

Replace one egg with:

4g yeast dissolved in 60 mL warm water

5g baking powder

- + 15 mL liquid
- + 5 mL vinegar
- 1 packet gelatin
- + 30 mL warm water
- 15 mL fruit puree
- 15 mL liquid + 7.5 mL oil
- + 5 g baking powder

250 g soft puréed tofu

Replace egg with beer in batters

Half of a large mashed banana for cakes or muffins Eggs play an important structural role in many recipes, making them difficult to avoid. Here are some ingredients to watch out for and some egg alternatives for you to experiment with in your recipes.

AVOID CHECK LABELS • Egg in any form · Baked goods · Pancakes, waffles, (white, yolk, dried, French toast · Batter-fried foods powdered) · Pasta • Egg substitutes Albumin Pretzels Fritters · Cream pies Ouiche · Ice cream Custard and Tartar sauce Lecithin puddings Vegetarian meat Marshmallows Eggnog substitutes Marzipan · Hollandaise sauce · Meatloaf, Lysozome meatballs Mayonnaise Mousse Meringue Noodles Ovalbumin Nougat Soufflés

Not an exhaustive list. Read ingredient labels carefully. 17,18





& GLUTEN, BARLEY, OATS AND RYE

Some people are allergic to the proteins in wheat, and it is recognized as a major allergen in many countries. Food Standards Australia New Zealand (FSANZ) broadens this category, including all gluten-containing cereals (wheat, oats, barley, rye, spelt and all their hybrid varieties). In addition to allergies, there are also other reasons for some guests to avoid consuming gluten, so it's important for you to understand the issues and know your options.

AVOID CHECK LABELS Ale and beer Wheat Gluten · Baked goods and Any variety of In addition to baking mixes wheat (einkorn, avoiding the foods emmer, farina, Breaded/batterlisted under Wheat, Kamut, seitan, spelt) fried foods those avoiding gluten must avoid Any form of wheat Breakfast cereals these grains and (bran, durum, germ, Crisps their products: gluten, grass, malt, · Crumbed foods sprouts, starch) · Wheat and wheat varieties (durum, Gravy Bulgar emmer, spelt, farro Bread crumbs Hydrolysed and einkorn wheat) vegetable protein · Couscous Rye · Ice cream Farina Barley · Malted products Gravy Oats Noodles · Hydrolysed wheat • Pizza protein Processed meats Matzoh and meat patties Pasta Buckwheat is not Sauces and Semolina related to wheat, salad dressings contains no · Wheat germ oil · Soups, stocks, gluten and is Soy Sauce sauces considered safe to eat. Starch

Not an exhaustive list. Read ingredient labels carefully. 17,18

Replace one cup of wheat flour with:

1 - 1¼ cups rye flour*	5% cup rice flour − + 1/3cup rye flour*	
√s - 1 cup rice flour	- 700ap i ye ilodi	
1 cup maize (corn flour)	- 5% cup rice flour + 1/3cup maize flour	
1 cup potato flour	5% cup potato starch	
1 cup soy flour	½ cup soy flour + ½ cup rice flour	
+ ¼ cup potato starch		
11/3cups rolled oats or oat flour*	½ cup potato flour + ½ cup rye flour*	

^{*} Not suitable for people avoiding gluten-containing cereals.

Good to Know

People with wheat allergies, coeliac disease and non-coeliac gluten sensitivity account for up to 10% of the population. Roughly 20% of people with a wheat allergy, will also experience a cross-reaction with other glutencontaining cereals. Therefore, when reviewing your recipes, make note of the presence of all gluten containing cereal grains noted in the table to the left.²¹

Coeliac Disease: It's Serious

When people with coeliac disease consume gluten, it triggers an auto-immune response. The immune system attacks the tissues of the intestines, causing long-term digestive problems including abdominal pain, chronic or intermittent diarrhoea, chronic constipation, vomiting, weight loss, bloating, and malnutrition. A strict lifelong gluten free diet is the only medical treatment for coeliac disease.

No Gluten, Please

Non-coeliac gluten sensitivity (NCGS) is still not widely understood, but people with this condition may experience symptoms such as abdominal pain, chronic diarrhoea, fatigue, abdominal distension, eczema, headache, blurred vision, depression, anaemia, paraesthesias, and joint pain after consuming gluten—though symptoms improve after following a gluten-free diet. Guests with NCGS may prefer to avoid eating gluten.²²



SOY

Known as soy, soya or soybean this is a standard ingredient in many Asian and vegetarian foods. Soybean allergies are common, especially among children and often an allergy to milk occurs in conjunction with an allergy to soy.

	allergy to soy.		
6	Ø AVOID		CHECK LABELS
	 Bean curd Edamame Emulsifiers Hydrolysed Vegetable protein Lecithin 	ers Tamari Sed Tempeh Teriyaki Tofu Vegetable gum or starch	Asian cuisine (risk of cross-contact) Broth and soups Baked goods Cookies and crackers Sauces
	MisoMSGSoy in any formSoybean		Textured vegetable protein(TVP) Vegetable starch

Not an exhaustive list. Read ingredient labels carefully. 17,18





SESAME SEED

Whether used as whole seeds or processed into sesame oil (which is not refined), these foods can cause allergic reactions for some people.



· Soy oils



MUSTARD

Seeds from the mustard plant are found in many condiments. These allergies are common in France and Spain, where they can trigger serious reactions.24 Mustard is not a declarable allergen in Australia and New Zealand.



AVOID

- Mustard seeds
- Mustard powder
- All prepared mustards (e.g. Dijon)

CHECK LABELS

- Curries
- Fish paste
- Marinades
- Processed meats
- Pickles
- - Mayonnaise
 - Sauces and dressings
 - Tomato sauce
 - and ketchup

Not an exhaustive list. Read ingredient labels carefully. 17,18



CELERY

Allergies to celery and celeriac are common in Switzerland and France, especially among people who are also allergic to birch pollen.26 Celery is not a declarable allergen in Australia and New Zealand.

- · Celery stalks and leaves
- Celery seeds
- · Celeriac root
- · Celery salt
- Salads
- Soups and stock cubes
- Spice mixes

Not an exhaustive list. Read ingredient labels carefully. 17,18

IUPIN

Until recently lupin was not common in Australian foods but are now increasingly found as part of our food supply. Peanuts and lupins both belong to the legume family. People with peanut allergies may also react to lupins. When in doubt, always double-check with your guests.24

AVOID

- · Lupin (whole seed)
- · Lupin flour
- · Lupini bean
- CHECK LABELS
- · Baked goods (especially gluten-free)
- Pasta (especially
- gluten-free)

Not an exhaustive list. Read ingredient labels carefully. 17,18



SULPHITES

Foods with sulphites over 10ppm are required to be declared on food labels in Australia and New Zealand. Used as a preservative in foods and beverages, sulphites (such as those in the table below) may affect 5-10% of people with asthma.25

AVOID

CHECK LABELS

such as raisins,

- Sulphur dioxide (220) Dried fruit
- Sodium metabisulphite (223)
- Potassium metabisulphite (224)

· Calcium sulphite

(226)

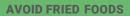
- apricots, and prunes
- Shellfish
- Meat products
- · Soft drinks & cordials
- Wine and beer

Not an exhaustive list. Read ingredient labels carefully. 17,18



MAINTAIN AN ALLERGEN-FREE ZONE

and keep it stocked with clean dedicated boards, utensils and knives.



The fryer is a common source of cross-contact.

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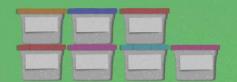


STORE PLATES ABOVE THE WORK

AREA to prevent cross-contact from falling food particles.

STORE FOODS in clearly labelled, sealed containers.

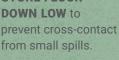
APRONS and **GLOVES** should be changed/replaced and **CUTTING BOARDS**, utensils, and cooking surfaces should be cleaned BEFORE food



BLEACH AND WATER at room temperature is the standard for sanitising food prep surfaces. Use 10 ml of commercial bleach or 25ml surfaces that have already been cleaned.

FOR SALAD STATIONS AND CONDIMENTS, keep foods containing allergens (e.g. eggs, cheese, nuts & seeds) separate and equipped with their own dedicated utensils. Better still put liquid condiments in dispenser bottles to minimise risks. Never use utensils for more than one item to avoid a high risk of cross-contact.

STORE FLOUR









SOAP AND WATER



CLEANING removes general dirt, grease and food particles. Do this **HOT WATER** decreases the

THE EFFECTIVENESS of a bleach

KEEP LABELLED SPRAY BOTTLES of

AIR DRY cleaned surfaces

SAFETY FIRST

Protecting your customers from allergic reactions begins in the kitchen.

By taking steps to prevent exposure and crosscontact during food preparation, you can help keep your customers safer. Here are some tips to come up with your own allergy management plan.

Understand Your Ingredients

Have a clear understanding of the ingredients used in your kitchen, and which ones contain common allergens. Ask your suppliers to share product information forms. It is mandatory for allergens to be declared on food labels in accordance with the Food Standards Code⁶. Check labels carefully and recheck each new pack. If a label says, "May contain ...", the food is not suitable to be used in an allergen free meal due to the risk of possible contamination in amounts that may be significant enough to trigger an allergic reaction in your diner.

Use Standard Recipes

Use standard recipes so that from day to day and chef to chef your food is consistent in its preparation. Review your recipes frequently, keeping an updated food allergen matrix which allows you to record which ones contain allergens and what those allergens are. The allergen matrix should be easily accessible to staff and management. Identify which recipes can be adapted with simple substitutions, and which are prohibited for people with specific food allergies. This will help your kitchen address each customer's needs, while reassuring guests that you have their best interests at hand.



Manage Your Workspace

Anyone preparing food should understand the importance of following food allergy protocols and receive refresher training annually. Make sure your staff knows that food allergies can be life-threatening, and use the tips on the opposite page to reduce the risk of cross-contact.

Allergy Etiquette

Making an allergy-safe

Listing known allergens clearly on each item puts your guests' safety first.

Asian Egg-Noodles with peanuts

Pasta with Pesto (contains pine nuts, dairy)

Salad with Blue-Cheese & Walnut Dressing

Fresh Fruit Salad with Macaroons (contains egg)

In Australia and New Zealand, food businesses are required to be able to provide information about the presence of allergens in the food they sell. An up-todate food allergen matrix can help staff in achieving this.

Keep Your Cool

Since allergies can begin or worsen at any time, it's possible that one of your guests will experience a reaction while dining with you. How can you prepare for an event like this?

- 1. Know the numbers of local emergency services and keep them posted in the kitchen and with front of house at all times.
- 2. If a customer is exhibiting allergy symptoms, ask if they have food allergies.
- 3. If the person is having trouble breathing, stay calm have them lie down, and call for an ambulance right away. Anaphylaxis can occur within seconds or minutes of exposure to the allergen, can worsen quickly, and can be
- 4. Record what and how much the person ate and share the information with emergency services. Preserve the suspected food.



Start the Conversation

Make sure your front of house staff know how to answer guests' questions about food allergies and communicate their needs to the kitchen. Establishing a set of guidelines can help everyone on your team communicate when a guest has allergies.

SERVER:

- Before seating guests, ask if anyone has a food allergy.
 If so, avoid seating them near the kitchen door where airborne allergens may affect them.
- Ask if anyone at the table has food allergies. If the answer is yes, write down all allergens!
- Ensure that the allergen is communicated to the kitchen in writing or entered into the ordering system.
- Inform the manager on duty about the allergen request, including the guest's table and order.

CHEF:

- Inform server if menu item can be prepared without the allergen, and indicate any adaptations required to the dish.
- Communicate clearly with your team. Acknowledge the request, and repeat it back to the server. Ensure all kitchen stations concerned verbally acknowledge the allergen request, as well.
- When the dish is ready, isolate it from others going to the table, verbally communicating the sensitive dish directly to the server or manager who will deliver it to the guest.

SERVER OR MANAGER:

 Bring the dish to the table, mentioning the allergen again to make sure there are no mix-ups.

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Food Allergens

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